



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/531,596	04/18/2005	Peter Parnes	1501-1298	3623

466 7590 08/22/2007
YOUNG & THOMPSON
745 SOUTH 23RD STREET
2ND FLOOR
ARLINGTON, VA 22202

EXAMINER

CHEN, YAN LU

ART UNIT	PAPER NUMBER
----------	--------------

2146

MAIL DATE	DELIVERY MODE
-----------	---------------

08/22/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/531,596	Applicant(s) PARNES ET AL.	
	Examiner Yan Chen	Art Unit 2109	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 April 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>4/18/2005</u> | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Drawings

1. The drawings are objected to because the unlabeled rectangular box(es) shown in the drawings (figure 1 and 2) should be provided with descriptive text labels.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

3. Claims 1-2, 4-5, 8 and 10-12 are rejected under 35 U.S.C. 102(a) as being anticipated by US 2002/0176404 A1 (hereinafter Girard).

Regarding claim 1, Girard teaches:

Apparatus for real-time data communication comprising

a sending client terminal and at least one receiving client terminal (figure 3, teaches two separate subscriber with device terminals that can communicate with each other, one would be designated as a sending terminal and the other a receiving terminal), the client terminals being provided with protective means (figure 3, edge switches), the real-time data communication transmitted via an intermediate distribution server (figure 4 and figure 8, IP Carrier Network [6]), the protective means being provided with a network translation unit for mapping one internally accessible network destination address with a corresponding externally accessible network destination address (§ [0295] teaches Network Address Translation),

characterised in that the sending client terminal and the intermediate distribution server are adapted to exchange information between one another about the current mapping of destination addresses for the server to access the receiving client terminal with real-time data communication (figure 8 and § [0175], [0476]-[0480] teach that part

of the IP Carrier Network, particularly SIP Application Server exchange information with sending terminal so that data can be transmitted to the receiving terminal).

Regarding claim 2, Girard teaches:

Apparatus for real-time data communication according to claim 1, characterised in that the protective means is a firewall arrangement (¶ [0295] teaches a firewall as a protective means for the device terminal.).

Regarding claim 4, Girard teaches:

Apparatus for real-time data communication according to claim 1, characterised in that real-time data communication includes data from streaming video, IP-telephony or synchronous communication (¶ [0183] teaches real-time voice/video communications).

Regarding claim 5, Girard teaches:

Method for real-time data communication comprising a sending client terminal (10) and at least one receiving client terminal (figure 3, teaches two separate subscriber with device terminals that can communicate with each other, one would be designated as a sending terminal and the other a receiving terminal), the client terminals being provided with protective means (figure 3, edge switches), the real-time data communication transmitted via an intermediate distribution server (figure 4 and figure 8, IP Carrier Network [6]), the protective means being provided with a network translation unit (not shown) for mapping one internally accessible network destination address with a

corresponding externally accessible network destination address (§ [0295] teaches Network Address Translation), characterised by exchanging information between the sending client terminal and the intermediate distribution server about the current mapping of destination addresses for the server to access the receiving client terminal with real-time data communication (figure 8 and § [0175], [0476]-[0480] teach that part of the IP Carrier Network, particularly SIP Application Server exchange information with sending terminal so that data can be transmitted to the receiving terminal).

Regarding claim 8, Girard teaches:

Computer program product for real-time data communication comprising a sending client terminal and at least one receiving client terminal, the client terminals being provided with protective means, the real-time data communication transmitted via an intermediate distribution server, the protective means being provided with a network translation unit for mapping one internally accessible network destination address with a corresponding externally accessible network destination address, characterised in that the computer program product is adapted for carrying out the method steps of claim 5 (see paragraphs [0135]-[0136] and [0087]-[0093]).

Regarding claim 10, Girard teaches:

Apparatus for real-time data communication according to claim 2, characterised in that real-time data communication includes data from streaming video, IP-telephony or

Art Unit: 2109

synchronous communication (§ [0183] teaches real-time voice/video communications).

Regarding claim 11, Girard teaches:

Apparatus for real-time data communication according to claim 3, characterised in that real-time data communication includes data from streaming video, IP-telephony or synchronous communication (§ [0183] teaches real-time voice/video communications).

Regarding claim 12, Girard teaches:

Apparatus for real-time data communication according to claim 10, characterised in that real-time data communication includes data from streaming video, IP-telephony or synchronous communication (§ [0183] teaches real-time voice/video communications).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard as applied to claims 1 and 2 above, and further in view of US 2004/0059942 A1 (hereinafter Xie).

Girard teaches Edge Switch which includes filtering function (protective mean) that filters data received from external source (see ¶ [0176] and [0415]). Girard further teaches that data passing through the Edge Switch is filtered through a firewall.

Girard does not explicitly disclose that the filtering function is a virus shield arrangement.

Xie teaches a network protection gateway between an internal and an external networks, where the network protection gateway (firewall) is applies as VoIP network address translation (NAT) and provides real-time anti-virus protection (paragraph [0033]).

It would have been obvious to one of ordinary skill in the art, having the teachings of Girard and Xie before them at the time the invention was made to modify the protection mean of Girard to include virus shield functionality as taught by Xie.

One of ordinary skill in the art would have been motivated to make this modification in order to better provide security against malicious data from passing through the firewall into the device/client in view of Xie.

6. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Girard as applied to claim 5 above, and further in view of US 2004/0034776 A1 (hereinafter Fernando et al.).

Regarding claim 6,

Girard teaches the method according to claim 5. Girard further teaches the establishment of encrypted communication (see ¶[0101], [0223], [0225] and [0228]).

Girard differ from the claim invention in that it did not specifically teach the exchange of secret key between the clients to encrypt a sequence in establishing that encrypted communication.

Fernando et al. teach the exchanging of a secret piece of information, such as a so-called key, between the sending and receiving client terminals (§[0007], [0008] and [0023]), the receiving client terminal transmitting requesting the sending client terminal to encrypt an arbitrary sequence by using the secret piece of information, the sending and receiving client terminals encrypting the arbitrary sequence by using the exchanged identical secret piece of information, and comparing the results of the communication terminals encrypted sequences so as to acknowledge further transmission of real-time data communication between the client terminals (§[0029]-[0031]). Fernando et al. further teach the exchanging the secret piece of information, the so-called key, in a secure transport mode such as secure HTTP (hypertext transfer protocol) via TCP (transmission control protocol) (see paragraph [0006]). Fernando et al. teach that such method reduces vulnerability created by an unauthorized program or other peer that might potentially establish a connection on the open port prior to the tended peer.

It would have been obvious to one of ordinary skill in the art, having the teachings of Girard and Fernando et al. before them at the time the invention was made to modify the establishment of encrypted communication of Girard to include exchanging of secret information (key) in an secure mode to be used to encrypt a message in establishing that trusted communication as taught by Fernando et al.

One of ordinary skill in the art would have been motivated to make this modification in order to establish secure and trusted communication between the intended clients in view of Fernando et al.


Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yan Chen whose telephone number is (571) 270-1926. The examiner can normally be reached on Monday through Friday 7:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Pwu can be reached on (571) 272-6798. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

YC


JEFFREY PWU
SUPERVISORY PATENT EXAMINER